

Translation

PATENT COOPERATION TREATY

PCT/DE2003/002447



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT 521,742

(PCT Article 36 and Rule 70) Rec'd PCT/PTO 23 JUN 2005

Applicant's or agent's file reference 2002P09792WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/002447	International filing date (day/month/year) 21 July 2003 (21.07.2003)	Priority date (day/month/year) 19 July 2002 (19.07.2002)
International Patent Classification (IPC) or national classification and IPC H01F 3/14		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>3</u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 11 November 2003 (11.11.2003)	Date of completion of this report 25 November 2004 (25.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/002447

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-15 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____ 1-21 _____, filed with the letter of _____ 15 July 2004 (15.07.2004)
- ☒ the drawings:
 pages _____ 1/4 - 4/4 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
 These elements were available or furnished to this Authority in the following language _____ which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE 03/02447

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	1-21	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations

1. Claims 1 and 18:

Technical area: Inductive component

Prior art: The X- and Y-documents indicated in the search report are documents that were of particular importance with respect to the claimed invention according to claim 1 as originally filed. Of these citations, DE-A-19 854 902, which is considered to represent the closest prior art, discloses an inductive component as per the preamble of the present claim 1. The remaining citations do not disclose any further relevant information.

Problem: Minimization of power loss in the transformer during operation.

Solution: The inductive component as per claim 1 is characterized in that the gap length is selected from the range $\geq 2.0 - \leq 10$ mm. Claim 18 pertains to the use of the component according to claim 1.

Inventive step: A solution as per claim 1 cannot be deduced from the available citations. Although DE-A-19 854 902 discloses a gap length of approximately 1 mm, the gap length indicated in claim 1 is neither disclosed nor suggested. This gap

length has the effect that, even if the inductive component is driven with several hundred volts, a relatively high Q factor may be achieved. The subject matter of the claim is therefore novel and involves an inventive step. The invention according to claim 1 and thus according to claim 18 meets the requirements of PCT Article 33(2) to (4).

2. Claims 2-17 and 19-21:

These claims pertain to embodiments of the invention as defined in claims 1 and 18 and as such likewise meet the requirements of PCT Article 33(2) to (4).

Observations or defects

1. Contrary to PCT Rule 5.1(a)(ii), the description does not cite D1 and D2 or indicate the relevant prior art disclosed therein.
2. The description is not consistent with the new claims (PCT Rule 5.1(a)(iii)).
3. On page 10 (line 23) the definite article ("die") has not been added after the words "Dazu ist" ("To this end"). On page 14 (line 35) the words "figure 5" have not been substituted for the words "figure 2".